

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-17 (Canceled)

18. (Withdrawn) A method of diagnosing Alzheimer's disease in a human patient suspected of having Alzheimer's disease, wherein said human does not exhibit symptoms of multiple sclerosis or meningoencephalitis, said method comprising obtaining a cerebrospinal fluid sample from said patient, determining whether said cerebral spinal fluid sample contains Chlamydia pneumoniae, wherein the presence of Chlamydia pneumoniae in said sample is an indication that said patient has Alzheimer's disease.

19. (Withdrawn) A method of diagnosing Alzheimer's disease in a human patient suspected of having Alzheimer's disease, wherein said human does not exhibit symptoms of multiple sclerosis or meningoencephalitis, said method comprising measuring the serum anti-Chlamydia pneumoniae antibody titer in a patient suspected of having Alzheimer's disease and comparing the serum anti-Chlamydia pneumoniae antibody titer in said patient with the mean serum anti-Chlamydia pneumoniae antibody titer in a population of control patients, wherein a higher serum anti-Chlamydia pneumoniae antibody titer in said patient compared with said mean serum anti-Chlamydia pneumoniae antibody titer is an indication that said patient has Alzheimer's disease.

20. (Withdrawn) A method of diagnosing Alzheimer's disease in a human patient, said method comprising administering an anti-SAF antibody to said human and determining whether

said anti-SAF antibody binds to central nervous system tissue in said human, wherein binding of anti-SAF antibody to central nervous tissue in said human is an indication that said human has Alzheimer's disease.

21. (Withdrawn) The method of claim 20, wherein said anti-SAF antibody is administered to said human intrathecally.

22. (Withdrawn) The method of claim 21, wherein said antibody is labeled with a detectable label and wherein binding of said antibody is assessed by detecting said label bound to said tissue.

23. (Withdrawn) An anti-SAF antibody molecule.

24. (Withdrawn) The anti-SAF antibody molecule of claim 25, wherein said antibody is selected from the group consisting of a monoclonal antibody and a synthetic antibody.

25. (Withdrawn) An ELISA kit comprising an anti-SAF antibody and an instructional material.

26. (Withdrawn) A method of diagnosing Alzheimer's disease in a human patient, said method comprising detecting evidence of the presence of *C. pneumoniae* in an intranasal sample obtained from said patient, wherein when the presence of *C. pneumoniae* in said sample is an indication that said patient has Alzheimer's disease.

27. (Withdrawn) A method of identifying a candidate compound for treatment of Alzheimer's disease comprising incubating cells infected with *Chlamydia pneumoniae* in the presence or absence of a test compound and measuring the level of replication of said *Chlamydia pneumoniae* in said cells, wherein a lower level of replication of said *Chlamydia pneumoniae* in

the presence of said test compound compared with the level of replication of said *Chlamydia pneumoniae* in the absence of said test compound, is an indication that said test compound is a candidate compound for treatment of Alzheimer's disease.

28. (Withdrawn) The method of claim 27, wherein said cells are selected from the group consisting of monocytes/microglia, macrophages, oligodendroglia, astroglial and neuronal cells.

29. (Withdrawn) A neuronal cell infected with *Chlamydia pneumoniae*.

30. (Withdrawn) A plurality of neuronal cells infected with *Chlamydia pneumoniae*.

31. (Previously Presented) A method of treating Alzheimer's disease in a living being comprising administering to the living being a therapeutic amount of an anti-microbial agent.

32. (Canceled)

33. (Previously Presented) The method of claim 32 wherein the antibiotic is selected from the group consisting of ciprofloxacin, ofloxacin, sulfamethoxazole, trimethoprim, doxycycline, minocycline, oxytetracycline, tetracycline, azithromycin, clarithromycin, dirithromycin, erythromycin and troleandomycin.

34. (Previously Presented) A method of treating Alzheimer's disease in a living being comprising administering to the living being a therapeutic amount of an anti-microbial agent and an anti-inflammatory agent.

35. (Canceled)

36. (Previously Presented) The method of claim 35 wherein the antibiotic is selected from the group consisting of ciprofloxacin, ofloxacin, sulfamethoxazole, trimethoprim, doxycycline, minocycline, oxytetracycline, tetracycline, azithromycin, clarithromycin, dirithromycin,

erythromycin and troleandomycin.

37. (Previously Presented) The method of claim 34 wherein the anti-inflammatory agent is a non-steroidal anti-inflammatory agent.

38. (Previously Presented) The method of claim 34 wherein the anti-inflammatory agent is selected from the group consisting of ibuprofen, phenylbutazone, indomethacin, sulindac, diclofenac, proxicam, naproxen, ketoprofen, piroprofen, flurbiprofen, tiaprofenic acid, tolfenamic acid and a COX-2 inhibitor.